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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/540,389	07/20/2005	Satoshi Takci	124418	2689	
25944 OLIFF & BER		3/2007	EXAM	EXAMINER	
P.O. BOX 199	28		CHOI, L	CHOI, LING SIU	
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER	
			1713		
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			10/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## **Advisory Action** Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/540,389	TAKEI ET AL.	
Examiner	Art Unit	
Ling-Siu Choi	1713	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 07 September 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires 3 months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): \_\_ 6. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: \_ Claim(s) objected to: \_ Claim(s) rejected: \_ Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: 12. Note the attached Information Disclosure Statement(s), (PTO/SB/08) Paper No(s). 13. 
Other: See Continuation Sheet. Lyz Color LING-SUI CHOI

PRIMARY EXAMINER

**Application No. 10/540,389** 

## **Continuation Sheet (PTO-303)**

Continuation of 3. NOTE: The recitation "an alkali-dissolution rate regulator selected from the group consisting of naphthoquinone compounds, compounds having a t-butoxycarbonvl group, compounds having a hydroxy group, compounds having a carboxy group, and compounds having a phenvl group" was not presented as a limitation in the previous claims. It is also noted that "compounds having a carboxy group" read on acid catalyst [Rutter et al. (EP 1 150 343 A2) or Meador et al. (US 5,919,599)],

Continuation of 13. Other: In view of [0009]-[0011], claim 1 is suggested to be amended as follows,

1. (Currently Amended) A gap fill material forming composition for manufacturing semiconductor devices by coating the composition on a substrate having a hole with an aspect ratio of 1 or more shown in height/diameter; baking the composition; contacting the composition with an alkaline aqueous solution after baking; coating a photoresist on the substrate; and transferring an image to the substrate using a lithography process; the composition comprising: a polymer having a hydroxy group or a carboxy group; a crosslinking agent; and an alkali-dissolution rate regulator selected from the group consisting of naphthoquinone compounds, compounds having a t-butoxycarbonyl group, compounds having a hydroxy group, compounds having a carboxy group, and compounds having a phenyl group,

wherein a gap fill material layer manufactured by coating and baking the gap fill material forming composition on a semiconductor substrate and baking it has a dissolution rate ranging from 3 to 200 nm per second for an alkaline aqueous solution having a

concentration of 0. 1% to 20%.